

ABSTRACT

The present invention relates generally to a molecular marker of the integrity of the extracellular matrix in an animal including a human subject. More particularly, the present invention provides a molecular marker of cartilage integrity. The identification of the molecular marker in circulatory or tissue fluid is indicative of disrepair of the extracellular matrix and in particular cartilage such as caused or facilitated by trauma or a degenerative disease or other condition, for example, arthritis or autoimmunity. The molecular marker is preferably in the form of a glycoprotein but the instant invention extends to genetic sequences encoding the polypeptide portion of the glycoprotein. Expression analysis of such genetic sequences provides predictive utility in detecting normal or abnormal extracellular matrix development. The identification of the molecular marker of the present invention enables the development of a range of diagnostic and therapeutic agents for degeneration of extracellular matrix or the poor development of the matrix at the fetal and postnatal stages including testing for mutations in the gene sequence in human disease such as but not limited to cartilage disease or arthritis. In a most preferred embodiment, the molecular marker is referred to herein as "WARP" for von Willebrand Factor A-Related Protein. The corresponding genetic form of WARP is referred to herein as "*WARP*".